ABSTRAK

HIDAYATUL MAZIDAH HARAHAP. Perbedaan Kemampuan Spasial dan Disposisi Matematis Antara Siswa Yang Diberi Pembelajaran Pendekatan Matematika Realistik Berbantuan Aplikasi *Wingeom* dengan Berbantuan Aplikasi *Cabri* di MTs S Islamiyah Kotapinang. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui: (1) Apakah terdapat perbedaan signifikan antara kemampuan spasial siswa pada pembelajaran pendekatan matematika realistik berbantuan aplikasi *wingeom* dengan berbantuan aplikasi *Cabri*, (2) Apakah terdapat perbedaan signifikan antara kemampuan disposisi matematis siswa melalui pembelajaran Pendekatan Matematika Realistik yang berbantuan aplikasi *Wingeom* dengan berbantuan aplikasi *Cabri*, (3) Bagaimana kadar aktivitas aktif siswa, selama proses penerapan pembelajaran Pendekatan Matematika Realistik berbasis aplikasi *Wingeom*. Penelitian ini merupakan penelitian eksperimen semu. Populasi penelitian ini adalah siswa kelas VIII MTs S Islamiyah Kotapinang, kemudian dipilih dua kelas. Kelas eksperimen 1 mendapat pembelajaran Pendekatan Matematika Realistik Berbantuan Aplikasi *Wingeom* dan kelas eksperimen 2 mendapat pembelajaran Pendekatan Matematika Realistik Berbantuan Aplikasi *Cabri*. Instrumen yang digunakan terdiri dari: (1) tes kemampuan spasial, (2) angket disposisi,(3) dan angket hasil aktivitas siswa dalam Pembelajaran Pendekatan Matematika Realistik Berbantuan Aplikasi *Wingeom.* Analisis data dilakukan dengan analisis kovarian (ANACOVA). Hasil penelitian menunjukkan bahwa (1) terdapat perbedaan signifikan antara kemampuan spasial siswa pada pembelajaran pendekatan matematika realistik berbantuan aplikasi *wingeom* dengan berbantuan aplikasi *Cabri* (2) terdapat perbedaan signifikan antara kemampuan disposisi matematis siswa melalui pembelajaran Pendekatan Matematika Realistik yang berbantuan aplikasi *Wingeom* dengan berbantuan aplikasi *Cabri*, (3) Aktivitas siswa dalam pembelajaran Pendekatan Realistik berbantuan aplikasi wingeom adalah efektif. Guru matematika diharapkan dapat menciptakan suasana pembelajaran yang menyenangkan, memberi kesempatan pada siswa untuk mengungkapkan gagasannya dalam bahasa dan cara mereka sendiri.

Kata Kunci: Pembelajaran Pendekatan Matematika Realistik Aplikasi Wingeom, Aplikasi Cabri, Kemampuan Spasial dan Disposisi Matematis

ABSTRACT

HIDAYATUL MAZIDAH HARAHAP. Differences in Spatial Ability and Mathematical Disposition of Students Between Given Realistic Mathematics Education by Using Applications *Wingeom* With Applications *Cabri* in MTs S Islamiyah Kotapinang. Thesis.

Thesis. Medan: Post Graduate Program, State University of Medan, 2016.

This study aims to determine: (1) Is there a significant difference between spatial ability of students learning mathematical approach realistic assisted application wingeom with assisted application Cabri, (2) Is there a significant difference between the ability of disposition of mathematical students through learning approach Realistic Mathematics who assisted application Wingeom with application assisted Cabri, (3) How active activity levels of students, during the implementation process of learning-based approach Realistic Mathematics Wingeom applications. This study is a quasi-experimental research. The population of this research is class VIII MTs S Islamiyah Kotapinang , then have two classes. 1 experimental class got Assisted Learning Approach Realistic Mathematics and Applications Wingeom experimental class 2 gets learning Realistic Mathematics Approach Assisted Application Cabri. The instrument used consisted of: (1) spatial ability tests, (2) questionnaire disposition, (3) and questionnaire results of activity of students in Realistic Mathematics Education approach Assisted Application Wingeom. Data was analyzed using analysis of covariance (ANACOVA). The results showed that (1) there is a significant difference between spatial ability of students learning mathematical approach realistic assisted application wingeom with assisted application Cabri (2) there is a significant difference between the ability of disposition of mathematical students through learning approach Realistic Mathematics who aided applications Wingeom with assisted application Cabri , (3) Activities of students in aided Realistic approach wingeom application is effective. The math teacher is expected to create a joyful learning, give students the opportunity to express his ideas in a language and in their own way.

Keywords: Realistic Mathematics Education,Applications *Wingeom,* Applications *Cabri*, Spatial Ability, and Mathematical Disposition